

**WHAT IS CLAIMED IS:**

1. An electrode apparatus comprising a base film having a bending part, an electrode layer formed in a region including said bending part on said base film, and an electrically insulating layer formed in a selected region including said bending part on said electrode layer,  
  
wherein a dielectric, which constitutes said electrically insulating layer, is a resin composition which includes, at least, a low Tg resin having a glass transition temperature equal to or lower than 25 degrees C, and a high Tg resin having a higher glass transition temperature than that of said low Tg resin.
2. An electrode apparatus according to claim 1, wherein said base film includes a first part and a second part having a difference in height with reference to said bending part, and said electrode layer is formed over said first and second parts.
3. An electrode apparatus according to claim 1 or 2, wherein said resin composition exhibits both the low and high glass transition temperature characteristics which said low and high Tg resins have, respectively.
4. An electrode apparatus according to claim 1 or 2, wherein the glass transition temperature of said high Tg resin is 40 degrees C or higher.
5. An electrode apparatus according to any one of claims 1 through 4, wherein said resin composition has both the functions for preventing

cracking liable to give damage to said electrically insulating layer by external force and for preventing blocking.

6. An electrode apparatus according to claim 1 or 2, wherein said base film is composed of a laminated member obtained by laminating a plastic film and a metal film together, said laminated member can easily be bent by hand and the bending state of said laminated member can be retained.

7. An electrode apparatus according to claim 1 or 2, wherein said bending part defines at a periphery thereof a receptacle part which receives therein a gel containing an electrolyte.

8. An electrode apparatus according to claim 1 or 2, wherein said electrically insulating layer has a thickness of  $0.5\text{ }\mu\text{m}$  to  $100\text{ }\mu\text{m}$ .